

Chapter 2

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Great Bay shoreline

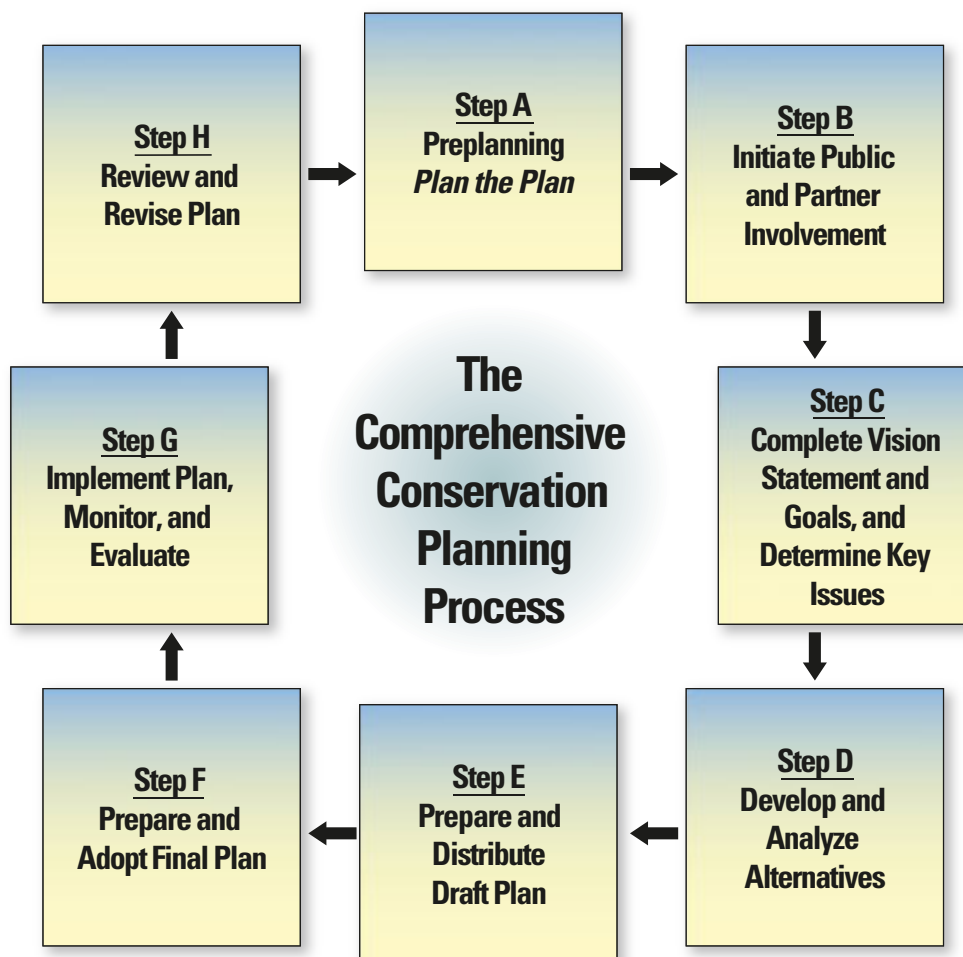
The Planning Process

- The Comprehensive Conservation Planning Process
- Issues, Concerns, and Opportunities

The Comprehensive Conservation Planning Process

Service policy (602 FW 3) establishes a comprehensive conservation planning process that also complies with NEPA (figure 2.1). The full text of the policy and a detailed description of the planning steps can be viewed at: <http://policy.fws.gov/602fw3.html> (accessed May 2012). We followed the process depicted below in developing the draft CCP/EA and this final CCP. Although the steps are described sequentially, the CCP planning and NEPA processes are iterative. It is normal to cycle through some steps more than once or to have several steps occurring simultaneously. The steps are described below in more detail and depicted in figure 2.1.

Figure 2.1 The Service's Comprehensive Conservation Planning Process



Step A: Initial Planning

We began preparing a CCP for Great Bay Refuge in early 2009. Initially, we focused on collecting information on the refuge's natural and cultural resources and public use program. The CCP core team of refuge and regional office staff and two representatives from NHFG started meeting to discuss existing information, draft a vision statement, and prepare for the public scoping meeting and a technical meeting of State and Federal partners.

Step B: Public Scoping

On June 17, 2009, we published a notice of intent in the *Federal Register* announcing that we were starting the CCP process for Great Bay Refuge.

We held a public scoping meeting on June 18, 2009, at the Newington Town Hall. We announced the location, date, and time for this meeting in local newspapers and through special mailings. Twenty-two people attended the meeting, which was held to let people know what the Service was doing to manage Great Bay Refuge, and to elicit their input on topics of interest to them about the refuge.

In June 2009, we also distributed a newsletter announcing the kick-off of the planning process. We followed that distribution late June with a mailing of issues workbooks. We distributed a workbook to everyone on our mailing list, to those who attended the public meeting, and to anyone who subsequently requested one. The purpose of the workbook was to collect ideas, concerns, and suggestions on important issues about refuge management. In the workbook, we asked the public to share what they valued most about the refuge, their vision for the future of Great Bay Refuge, and any other refuge issues they wanted to raise. Eleven copies of the workbooks were completed and returned, along with other written responses.

We held a meeting with 26 representatives of State and Federal partners on July 8, 2009, at the Great Bay Discovery Center in Stratham, New Hampshire. The purpose of the meeting was to identify issues, determine the significant resource values attributed to the refuge, and to seek advice from technical experts on what resources of conservation concern in the refuge planning area should be a management priority.

We compiled a list of key issues, concerns, and opportunities to address in the CCP based on comments at the public meeting, the written responses and completed workbooks we received, our meeting with State, local, and other Federal agencies, and from internal discussions with refuge, planning, and other Service programs. These issues are described in more detail below under the heading, “Issues, Concerns, and Opportunities.”

Steps C and D: Vision, Goals, and Alternatives Development

We developed a draft vision statement and goals after consideration of the refuge’s purposes, the Refuge System mission and goals, the results of scoping and the issues and opportunities identified (see below), and after an evaluation of the role the refuge could play in supporting landscape-level conservation plans developed by either the Service or our partners. We continued to consult with experts throughout 2009 and 2010, and to meet regularly as a core team, as we refined the refuge vision and goals, and developed and evaluated our proposed management alternatives.

Step E: Draft CCP and NEPA document

Between July 2009 and January 2012, the core team worked on drafting the CCP/EA. We published a notice of availability in the *Federal Register* announcing our release of this draft for a 39-day period of public review and comment on February 10, 2012. During that comment period, we held two public meetings to obtain comments directly from individuals. We also received comments by regular mail and e-mail. After the comment period ended, we reviewed and summarized all of the comments received, developed our responses, and revised the CCP as warranted based on the comments. We include a summary of these comments, and our responses to them, as appendix K in this document.

Step F: Adopt Final Plan

We submitted the final plan to our Regional Director for review in June 2012. The Regional Director selected alternative B from the draft CCP/EA, along with several minor changes, to implement in the final plan. Our Regional Director also determined that a FONSI was appropriate (see appendix L), and certified this

final CCP meets agency compliance requirements, achieves refuge purposes, and helps fulfill the mission of the Refuge System. With an affirmative FONSI and other positive findings, the Regional Director approved the final CCP. We will publish another notice of availability in the *Federal Register* to announce the final decision and availability of the final plan. We will also distribute a newsletter announcing this decision to all contacts on our project list as well as post that newsletter on our Web site. These actions will complete planning step F to prepare and adopt a final plan.

Step G: Implement, Monitor, and Evaluate Plan and Step H: Review and Revise Plan

We will begin to implement the plan and monitor our success immediately after we publish our final notice of availability in the *Federal Register*. Over the 15-year life of the plan, we will annually review the plan to see if it requires any revisions. We will update and revise the plan at least every 15 years, or sooner if significant new information becomes available, ecological conditions change, a major refuge expansion occurs, or we identify the need to do so during our annual reviews.

Issues, Concerns, and Opportunities

We developed a list of key issues to address in the CCP from the responses to our issues workbook, public scoping meeting, technical meeting with partners, and planning team discussions. We define issues and concerns as “any unsettled matter requiring a management decision.” This can be an “initiative, opportunity, resource management problem, threat to a resource, conflict in use, or a public concern.” The following summary provides a context for the issues that arose during the scoping process.

Habitat and Species Management

The refuge was acquired in 1992, to conserve fish and wildlife and their habitats and to protect water quality. This is the foundation for what we do on the refuge. Despite its relatively small size at just over 1,100 acres, Great Bay Refuge is surprisingly diverse in its habitats and the species that it supports. The wide variety of habitats on the refuge is the result of human disturbances and past land uses. The grasslands and impounded wetlands are examples of habitats that were created prior to Service ownership, and are now maintained to benefit wildlife. The refuge’s shoreline along Great Bay Estuary is important in protecting water quality in the bay. The refuge’s salt marsh and rocky shoreline, as well as adjacent intertidal areas, are critical to the health of the entire Great Bay Estuary.

We heard a range of opinions, particularly from our partners, on which habitat types we should emphasize and which Federal trust and State species of concern should be a management focus. Some of those habitats favored, in particular those for grassland and shrublands habitats, can be labor-intensive and expensive to maintain. Impounded wetlands can also require intensive management and maintenance. All habitat management decisions present tradeoffs between various suites of species that use different habitat types. Many people noted the potential role of the refuge in helping to restore oysters and eelgrass in the bay. The history of the refuge as a former Air Force Base presents some species and habitat management considerations due to remaining military infrastructure and historic buildings and environmental contaminants.

The following key issues and concerns arose concerning habitat and species management:

- What is the appropriate contribution of the refuge to regional landscape habitat goals, including grassland and shrubland habitats?

- Which grassland and shrub habitat areas on the refuge should be maintained? How will we manage for them on the refuge?
- Which upland forest habitats and forest-dependent species should be management priorities? How will we manage for them on the refuge?
- How should we manage the former Weapons Storage Area, consistent with refuge goals and objectives?
- What role, if any, should the refuge have in restoring New England cottontail, a candidate for the Federal list of threatened and endangered species?
- What is the refuge's role in restoring Karner blue butterflies to the Concord Pine Barrens?
- How will we balance the management of aquatic habitats for wetland-dependent birds, fisheries, and biological integrity?
- How will we manage the refuge's impoundments? Should we pursue restoration of wetland habitats through dam removal?
- How will we ensure the integrity of water quality to protect freshwater and saltwater-dependent species?
- What role should the refuge have in helping to restore oysters and eelgrass beds in Great Bay Estuary?
- How will the refuge manage exemplary natural communities and protect rare plant populations?

Invasive Species

Invasive species are those that are nonnative (or alien) to the area and which cause, or are likely to cause, economic or environmental damage or harm to human health. Great Bay Refuge began a systematic inventory and mapping of invasive plant species in 2002. Much of the refuge has been mapped and 34 invasive species recorded. This is typical of southeastern New Hampshire, and especially on lands previously disturbed, like the refuge. Invasive plant species are a significant management challenge given that they occur in all habitats on the refuge. Invasive species control methods used on the refuge include hand pulling with weed wrenches, annual mowing, herbicides, and biological controls for purple loosestrife. In addition to invasive plants, the nonnative mute swan occurs in Great Bay waters, including the refuge. The Service has partnered with NHFG to control this species given its negative impact on native waterfowl and their habitats.

The following key issues and concerns arose concerning invasive species:

- Which invasive species should be a priority for control on refuge lands?
- How will we control specific invasive plant and animal species on refuge lands?

Environmental Contaminants

As the site of a former Pease Air Force Base, the refuge still has potential contaminant issues. The adjacent Pease Airport presents additional challenges because runoff from the airport could flow onto the refuge. The airport authority is currently installing new de-icing pads not far from the refuge boundary. It is unclear what, if any, potential threat runoff from these pads might pose to refuge resources.

The following key issues and concerns arose concerning environmental contaminants:

- How will we address environmental contaminants resulting from past land uses and from offsite activities?
- How will we work with the Pease Airport Authority to protect water quality and address potential airport/wildlife conflicts?

Landscape-scale Conservation and Climate Change

Historically, wildlife conservation efforts have tended to focus on single species or small suites of species. Given the changing landscape and climate, we need to manage and collaborate with partners beyond traditional boundaries. Some impacts—such as climate change, urbanization, resource extraction, and other economic and social pressures—occur at scales well beyond the boundaries of a single refuge and affect entire ecosystems, not just a few species. Landscape-level conservation involving multiple partners working together across large regions might be one of the most effective and important ways to help species of conservation concern and their habitats. Research collaboratives among multiple partners and at multiple scales can identify regional trends that would inform site specific management on the refuge. Almost all the respondents to the issues workbook supported a greater refuge role in protecting habitats outside the current refuge boundary. This included support for all methods of habitat conservation, including fee simple and conservation easement acquisition, supporting other conservation partners in their acquisitions, landowner education, and habitat restoration on private lands.

The following key issues and concerns arose concerning landscape-scale conservation and climate change:

- What role should the Service play in conserving lands and habitats in the Great Bay watershed and in the Concord Pine Barrens?
- How can the refuge work with partners to improve the water quality of the Great Bay Estuary?
- How can the refuge enhance its partnerships within the region to meet landscape-scale conservation concerns, such as climate change, invasive species, land development, and habitat fragmentation?
- What actions can the refuge take, in partnership with others, to minimize impacts from climate change?
- What role should the refuge play in regional research collaboratives that address management issues of concern to the Service?

Public Uses and Community Partnerships

The Refuge Improvement Act identified wildlife observation and photography as priority public uses for refuges, along with environmental education, interpretation, hunting, and fishing. In 2006, a regional visitor services team identified wildlife observation and photography as the areas of emphasis for Great Bay Refuge. We heard during public scoping that the primary reasons that many people visit the refuge are for wildlife and nature viewing, specifically for bird watching and hiking the nature trails. Many respondents also wanted to see more access and more trails on the refuge, but supported the primary roles of the refuge as conserving habitat and protecting water quality. Our partners recognize that not all priority public uses can be provided on the refuge, and that some of these activities are available on other lands in the Great Bay area that are open to the public.

The lack of staffing at the refuge has limited our ability to expand and monitor public uses on the refuge, and outreach to the community to offer environmental education and interpretive programs in collaboration with our community partners. Partnerships, including the existing core volunteer group, are essential to meeting the vision and goals of Great Bay Refuge. In 2008, volunteers contributed 2,500 to 3,000 hours to the refuge.

The following key issues and concerns arose concerning public uses and community relations:

- What are the appropriate types and levels of wildlife-dependent public uses on the refuge?
- How will we manage compatible, nonpriority public uses on the refuge?
- What staffing levels are needed to enhance onsite interpretation, environmental education, and outreach programs to reach a wider audience?
- What partnership opportunities exist to increase the number of environmental education, interpretation, and outreach programs?
- How will the refuge cultivate an informed and educated public to support the mission of the Service and the purposes for which the refuge was established?
- How will we build and maintain an active volunteer program?

Cultural Resources

At least 22 archaeological or historical sites are present on Great Bay Refuge, including the remains of brick factories, ferry landings, and the foundations of buildings that were once part of local dairy operations. Two structures from the former Margeson Estate, the main house and a caretakers's residence, remain on the refuge and are located on Long Point Road in an area closed to the public. Both structures are listed as part of a district nomination in the National Registry of Historic Places. As a Federal land management agency, we are responsible for locating and protecting cultural resources, including archaeological sites and historic structures. Balancing the protection of historic resources with the refuge's primary purposes of wildlife and habitat conservation is a management challenge.

The following key issues and concerns arose concerning cultural resources:

- How should we steward the historical structures on the refuge, including the Margeson Estate?
- What should we do with other remaining structures, including the bunkers and other infrastructure remaining from the former Air Force base?
- How will we preserve, protect, and interpret cultural resources on refuge lands?